

REMARKS

Claims 1-12, 14-25, 27-38 and 40-42 are pending in the Application. In the foregoing amendments, claims 1, 3, 14, 27 have been amended. Support for these amendments can be found in the specification and claims of the application as filed. No new matter has been added by these amendments.

Applicants respectfully request entry of the foregoing amendments and reconsideration of the application in light of the amendments above and the remarks below.

Claim Rejections under 35 U.S.C. § 103(a)

In the Office Action, claims 1-7, 14-20, 27-33, and 35-38 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Schulist (6,542,558) in view of Wang (6,526,531). Applicants respectfully traverse these rejections.

Schulist discloses an architecture of a receiver, including an antenna, a demodulation unit, a turbo decoder, an SNR adoption unit, and a power control system. The power control system further includes an SNR estimator, a power controller, and a reference SNR module.

Schulist states that unlike the conventional receiver architecture, the turbo decoder in the aforementioned receiver relies on **a constant or quasi-constant SNR value** to support the turbo decoding process. The constant or quasi-constant SNR value is derived from the reference SNR module generated by the reference SNR module. More specifically, the reference SNR is forwarded to the SNR adoption unit, which modifies the reference SNR based on one or more factors. The modified SNR is then forwarded to the turbo encoder, which uses the quasi-constant, modified SNR to generate the decoded sequence (see, col. 5, line 54 to col. 6, line 10).

Wang discloses a method of **early termination of iterative decoding**. According to Wang, early termination of decoding may occur prior to an intermediate iteration threshold of M iterations when the parity check value of the decoded frame is equivalent to the parity check value calculated from the error detection information. Early termination of decoding may also occur when a difference in decoding error between frames is either i) below a minimum error distance threshold or ii) no longer monotonically decreasing (see FIG. 4; col. 7, line 51 to col. 8, line 53).

In contrast, embodiments and claims of the present application relate to determining when to **begin decoding** in a communication system, so that **early termination of current packet transmission** can be made, thereby reducing power consumption of the decoder. Neither Schulist nor Wang, whether alone or in combination, teaches or even suggests such. For example, neither Schulist nor Wang, whether alone or in combination, teaches or suggests “estimating a quality metric of a channel associated with a segment of a received signal; determining a quality metric threshold; delimiting an interval based in part on the quality metric threshold; and decoding the segment when the estimated quality metric is outside of the interval,” as recited in independent claim 1, 14, or 27 (emphasis added). Note, in common usage to “delimit” is to “establish the limits or boundaries of, demarcate.”

Furthermore, the Examiner failed to provide any motivation, either in the references themselves or in the art, to modify or combine Schulist and Wang. As stated above, Schulist teaches how to design a receiver that performs the decoding process based on a **constant or quasi-constant SNR value**. Whereas Wang teaches a method of **early termination of decoding**. Not only is there lack of motivation for one skilled in the art to modify or combine Schulist and Wang based on their teachings, a combination of Schulsit and Wang would not yield the present invention as recited in claims 1, 14, 27.

Thus, Applicants submit independent claims 1, 14, 27 are allowable over the cited references, for at least the reasons stated above. Applicants respectfully request that the rejections of these claims be withdrawn.

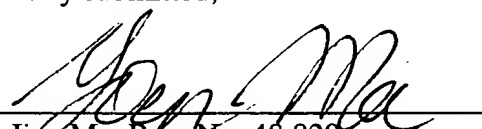
Claims 2-12, 15-25, 27-38, 40-42 depend respectively from independent claims 1, 14 ,27, and therefore are allowable as well. Applicants respectfully request that the rejections of these claims be withdrawn.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that this application is now in condition for allowance. Accordingly, reconsideration and allowance are respectfully requested. Should any issues remain unresolved which the Examiner believes could be resolved in a telephone interview, the Examiner is requested to telephone the Applicant's undersigned attorney.

Respectfully submitted,

Dated: 2/15/2005


Jian Ma, Reg. No. 48,820
Tel. 858-651-5527

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 651-4125
Facsimile: (858) 658-2502